



# Cumberland

# Public Works Department

FY09 Budget

John DiFonzo -  
Engineering

Fred Streett –  
Utilities

John Chapman –  
Maintenance

# The three Divisions of Public Works

## **Maintenance Division**

- Street
- Facilities
- Fleet
- Park & Recreation
- Grounds
- Traffic Lights
- Street Lights

## **Utilities Division**

- Water Treatment
- Water Distribution
- Sewer Collection, Storm Sewers & Flood Control
- Wastewater Treatment

## **Engineering Division**

- Capital Project Design and Administration
- GIS Mapping
- Environmental
- Natural Resources
- Sub-division reviews



# Engineering Division

- Budget is mostly for personnel (75%)
  - 8 positions plus summer interns (Temp.)
- City Planner was removed from Engineering Budget
- Environmental Specialist is charged to WWTP
- Natural Resources Specialist and Intern are charged to Water
- A GIS Position was requested, but not funded



# GIS

- GIS has only become affordable in relatively recent years
- An Inspector/Technician position was modified to deal with GIS because Brooke Firlie was selected for the position and he had those capabilities.
- GIS is too important to our future to be doing it as time allows, but with current staffing Brooke also has to handle Utility Permits, SHA Reports, Inspections, computers and software support.
- GIS will be used by all departments in the future, particularly Planning, Police, Fire, Utilities, Service Requests, Traffic, Asset Management, Tree Management, Pavement Management, etc., etc....
- That position was not funded this year, but ARC has provided a great deal of Technical Assistance funding for various phases of the GIS that have allowed for the purchase of a GIS Server, equipment and software.
- Matching Funds are budgeted in Utilities, since that is the work that is being done (Sewer Mapping).



GIS Example



# Environmental and Natural Resources

- All Utility and Environmental Issues
- Tree planting and Tree Canopy Program
- Watershed Protection
- Development Issues
- MDE & EPA Regulations





# Major Capital Projects for FY' 09

- Complete Rolling Mill Access (\$2,073,150)
- Virginia Avenue Improvements (\$1,528,724)
- Pavement Overlays (PMS)
- Evitts Creek CSO (\$6,275,000 funding in-place)
- Ridgedale Reservoir Replacement (\$3,500,000)
- ENR at WWTP (\$38,000,000 - 73% Grant)
- Others (Some listed in Operating Divisions)

# Rolling Mill Access (MD Ave.)





# Craft House – Constitution Park



# Springdale Street





# Maintenance Division

- Streets, Facilities, Fleet, Park & Recreation, Grounds, Traffic Lights, and Street Lights



# Maintenance Staffing Comments

- The Maintenance Division is in the process of matching job tasks with job descriptions – job tasks have changed for various reasons most importantly technology. Training is and will be identified for the changes. Training is planned to maximize employees potential.
- The key to the success of the division is preventive maintenance by which the life cycle of pavements, structures, and equipment can be maximized.
- Equipment is and will be requested to maximize the work force available. The average age of equipment requested is 15 years old.
- Facility structures such as roofs will be scheduled for replacement by expected lifecycle. The Municipal Service Center roof is due FY09-10.
- The JCI Project has put the division in a better position to do preventive maintenance and to respond to problems in facilities with HVAC alarms that are received by e-mail / Blackberry.
- Another part of JCI Project is the re-lamping of the traffic lights with LED. The lamps last a projected 5-6 years. This will enable us with our limited work force to emphasize on traffic light controllers etc.



# Street Maintenance

- Maintenance of 300 lane miles + alleys, public sidewalks, pedestrian underpass and bridges.
- Employees: 18 (includes the superintendent and the coordinator)
- Projects include: PMS paving, sweeping, utility hole / sidewalk repair, HMA repairs, snow plowing, roadside trees, signage, and line painting.
- New project: Contractual Line Painting – this will allow our existing work force to make sign replacement as well as pavement markings there main task.



# Street Maintenance Equipment & Staffing

- Equipment requests include the replacement of 1993 Tool Bed Truck with 145,000 miles (included in this budget), trailer to haul the asphalt paver and roller at the same time, 1996 crew cab with 135,000 miles (included in this budget), Bobcat S – 160 with attachments, 5 ton dump to replace a 1993 model (included in this budget), backhoe to replace 1987 model.
- No staffing request at this time.



# Facilities Maintenance

- Facilities (everything except daily cleaning), Architectural Street Lights (Decatur St.), Traffic Lights, Snow Removal Public Sidewalks, Bio-hazard clean-up, and inter office mail / other.
- Employees: 2 (1.5 FTE's for maintenance .5 for inter office mail and other.
- Staffing request for 1 maintenance worker (to get more work accomplished) not in this proposed budget.
- Roof replacement at the Municipal Service Center not in this budget will be requested in FY09-10.
- Request for the exterior improvement to City Hall (maintain the historic value) by the re-pointing and possible sealing of the building (not included in this budget).
- Future improvements to all city buildings including bringing back the historic integrity to City Hall (future budget requests).
- Equipment request includes 1 van / mobile workshop \$26,000 to replace a 1991 van ( not included in this budget).



# Fleet Maintenance

- Preventive maintenance and repair of most city rolling stock.
- Employees: 4 Mechanics
- Equipment requests in this budget: Welder / Compressor \$25,000 For New Mechanics Truck Purchased in FY08 that replaces 1976 model that the compressor does not work. This equipment will let the mechanics do more field welding and service work.
- Facility changes in this area are taking place to increase productivity and to improve work environment.
- No staffing requests at this time.



# Park and Recreation Maintenance

- Constitution Park, Veterans Park, Pine Ave. Playground, Centre St. Playground, Sun Dial Area, Lucy's Park, Valley St. Park, Smith Park, Gene Mason Complex, JayCee Field, Al Abrams Field, Cavanaugh Field, Long Field, and George Washington's Headquarters.
- All building maintenance functions within Park Rec. Facilities.
- All field maintenance including prep. for various sports, mowing, herbicides, and repairs.

# Park and Recreation Maintenance

## Staffing / Equipment

- Employees: 6 fulltime (includes supervisor), 3 seasonal employees for less than six months.
- No staffing requests at this time.
- Equipment Requests: Zero Turn Mower \$7,149 to replace 1997 model (not in this budget), Aerator & roller \$6,897 to help with the maintenance of fields due to increase field usage (not in this budget), 2 pickups w/ tool boxes \$40,000 replaces a 1996 and a 1993 model (in this budget). Also the transfer of 1998 Van from Park and Rec. Programming to replace 1979 Dodge Van.





# Grounds Maintenance

- Public Works Facilities Mowing (the majority), blighted property mowing and abatement, corridor clean-up, leaf pick-up and the cleaning of the pedestrian underpass. Other tasks are assigned to maximize the availability of this work force.
- Employees: 6 seasonal employees (work less than six months per project).
- No staffing increase request at this time.
- No equipment request at this time (they use transferred equipment from other areas).



# Traffic Light Maintenance

- 24 intersections + pedestrian signals.
- Employees: 1.5 FTE facility employees as well as assistance of the Utilities Division Electricians.
- Staffing request is one which is part of the facility maintenance total (not included in this budget).
- No equipment requested at this time.
- 4 intersections in poor condition at this time (wiring needs replaced and is not included in this budget).

The background is a solid blue gradient. At the top, there are several thin, wavy lines in shades of light blue and cyan, creating a sense of movement or water. The main body of the slide is a darker blue.

# Utilities Division

Water , Wastewater, Storm Sewers  
Flood and Treatment Plants



## **UTILITY STAFFING COMMENTS**

**The Utilities Division created two cost efficient positions. Both of which are Journeymen Electrician with one having ISA Certification in the Utility Maintenance Branch. These positions perform maintenance in both Water and Wastewater Plants as well as in Public Works, Sewer/Flood, Fire and Police. The creation of these positions has been cost efficient, eliminating the need to outsource electrical work for the City.**

**Both Water & Wastewater plants have had extensive replacement of pumps, motors, SCADA and PLC upgrades to ensure cost efficiency.**

**With reorganization and consolidation of clerical staff in the Utilities Division. (The Administrative Assistant located at the WWTP, now does all clerical duties for the Water Filtration Plant as well as WWTP, Sewer/Flood)**

**Since the Risk Management Committee has been established, Worker's Compensation Claims have decreased – 2005 21 injuries, 2006 12 injuries and 2007 10 injuries**



## **WASTEWATER TREATMENT**

Operations/maintenance of 15 MGD Wastewater facility  
Evitts Creek, Braddock Road, Williams Road and Fredrick Street Pump Stations

Employees: 17 (Incl Ass't Director/Utilities, two Journey Electricians)  
1-Supervisor, 1-Clerical, 4-Tech III, 1-Tech II, 3-Tech I,  
2-Laboratory, 1-Maint. Mechanic, 1-Flex Worker II

### **Projects**

- \$38 million Enhanced Nutrient Removal Project
- Evitts Creek Pump Station and Bar Screens
- Repair / paint primary clarifiers





## Future Staffing & Costs at WWTP (ENR)

- The ENR Project will require additional operators for the Denitrification Filter Process
- Sludge dewatering and drying will be handled through a Design / Build / Operate Contract
- Methanol will be added for a carbon source, and the cost of methanol has been increasing

# Water Treatment - Staffing

- 1 – Plant Superintendent
- 5 – Plant Technician III
- 3 – Plant Technician I
- 1 – Flexible Worker



# *Summary Of Fy-09 Projects:*

- ➔ Replace and upgrade motors, pumps & piping at McNamee Pumping Station. Project will also include the installation of a flow meter to track water demand/usage in the McNamee Tank service area.
- ➔ Replace Ridgedale Reservoir with new 4.0 MG concrete storage tank.
- ➔ Replace and upgrade motors, pumps & piping at Seneca Pumping Station.
- ➔ Repair & repaint interior surface of Haystack Water Storage tank.
- ➔ Replace plant heating system with new efficient heating system.
- ➔ Replace roof over chemical storage & solids dewatering area.
- ➔ Continue to expand and update automated controls systems at the Plant.
- ➔ Engineering consultant will further evaluate current chlorine feed system and design new feed system

# Water Distribution - 25 Employees

- 2 –Supervision
- 1 – Administrative Assistant
- 8 –Pipe Technician III. All passed State of Maryland Certification Exams as Water Distribution Operators.
- 4 –Pipe Technician II
- 1- Pipe Technician I
- 1 – Meter Technician Coordinator. This employee is certified to test water and meter accuracy.
- 6 –Service Technician II. It should be noted 2 of these work weekdays and weekends to provide service and Emergency response
- 1 –Service Technician I



# FY'09 Projects

- Installation of two 36" main valves to aid in flow control for the major water line in to central Cumberland
- Extend a 10" water main to the Turano property on the East side of Cumberland to provide infrastructure for future development.
- Using existing technologies and equipment provide a complete leak detection survey of the entire system.





# Waste Water Collection & Flood Control

- 1 - Supervision
- 1 - Flood Plant Operator
- 1 - PW Crew Leader
- 3 - Pipe Technician III
- 3 - Pipe Technician II
- 3 - Pipe Technician I
- 1 - Harvey Shadwell will be retiring next month





# FY '09 Projects

- Conversion of existing catch basin grates to bicycle friendly grates.
- Construction of a garage to store and service the sewer flush and vector trucks